

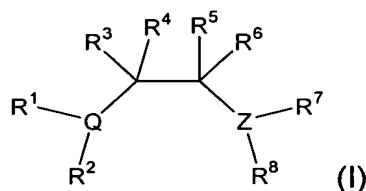
AMENDMENTS

This listing of claims replaces all prior versions and listings of claims in the application.

IN THE CLAIMS

1-10. (Canceled)

11. (Currently amended) A process for the polymerization of olefins, comprising the step of contacting, under polymerizing conditions, one or more polymerizable olefins with an active polymerization catalyst comprising a group 3 through 11 (IUPAC) transition metal or lanthanide metal complex of a ligand of the formula (I)



wherein:

Z is nitrogen and Q is phosphorus, or Z is oxygen and Q is phosphorus, or Z is oxygen and Q is nitrogen;

provided that:

when Q is phosphorous and Z is nitrogen:

R¹ and R² are each independently hydrocarbyl, silyl, or substituted hydrocarbyl having an E_s of about -0.90 or less;

R³, R⁴, R⁵, and R⁶ are each independently hydrogen, hydrocarbyl, a functional group, or substituted hydrocarbyl;

R⁷ is hydrogen, hydrocarbyl, substituted hydrocarbyl or silyl; and

R⁸ is hydrocarbyl, substituted hydrocarbyl, or silyl;

provided that any two of R³, R⁴, R⁵, R⁶, R⁷ and R⁸ vicinal or geminal to one another together may form a ring;

when Q is phosphorous and Z is oxygen:

R¹ and R² are each independently hydrocarbyl, silyl, or substituted hydrocarbyl having an E_s of about -0.90 or less;

R³ and R⁴ are each independently hydrogen, hydrocarbyl, a functional group, or substituted hydrocarbyl;

R⁵ and R⁷ taken together form a double bond;

R⁸ is not present; and

R⁶ is -OR⁹, -NR¹⁰R¹¹, hydrocarbyl or substituted hydrocarbyl,

wherein R⁹ is hydrocarbyl or substituted hydrocarbyl, and

R¹⁰ and R¹¹ are each independently hydrogen, hydrocarbyl or substituted hydrocarbyl; and

provided that any two of R³, R⁴, and R⁶ vicinal or geminal to one another may form a ring; or

R¹ and R² are each independently hydrocarbyl, silyl, or substituted hydrocarbyl having an E_s of about -0.90 or less;

R³, R⁴, R⁵ and R⁶ are each independently hydrogen, hydrocarbyl, a functional group, or substituted hydrocarbyl;

R⁷ is hydrocarbyl, silyl, or substituted hydrocarbyl; and

R⁸ is not present; and

provided that any two of R³, R⁴, R⁵, R⁶, and R⁷ vicinal or geminal to one another may form a ring;

when Q is nitrogen:

R¹ is hydrocarbyl, silyl, or substituted hydrocarbyl having an E_s of about

-0.90 or less;

R² and R³ are each independently hydrogen, hydrocarbyl, a functional group, or substituted hydrocarbyl, or taken together form a double bond;

R⁴ is hydrogen, hydrocarbyl, a functional group, or substituted hydrocarbyl; Z is oxygen;

R⁶ and R⁷ taken together form a double bond;

R⁸ is not present;

R⁵ is -OR¹², -R¹³ or -NR¹⁴R¹⁵, wherein R¹² and R¹³ are each independently hydrocarbyl or substituted hydrocarbyl, and

R¹⁴ and R¹⁵ are each hydrogen, hydrocarbyl or substituted hydrocarbyl;

provided that when R² and R³ taken together form an aromatic ring, R¹ and R⁴ are not present; and

further provided that any two of R², R³, R⁴ and R⁵ vicinal or germinal to one another taken together may form a ring.

12. (Currently amended) The process of Claim 11, wherein said one or more polymerizable olefins are compounds of the formula H₂C=CH(CH₂)_nG (VIII), wherein n is 0 or an integer of 1 or more, g G is hydrogen or -CO₂R²⁵, and R²⁵ is hydrogen, hydrocarbyl or substituted hydrocarbyl.
13. (Original) The process of Claim 12, wherein said one or more polymerizable olefins comprises ethylene.
14. (Original) The process of Claim 13, wherein said one or more polymerizable olefins comprises ethylene and at least one other polymerizable olefin.

15-16. (Canceled)